Lake Champlain Sea Grant Project
2012 NSGO Review

Nikola Garber

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LC SG Management

- Management staff (Name, position, FTE)
  - Director, Mary Watzin, 0.2 FTE
  - Director for Outreach & Education, Jurij Homziak, 0.8 FTE
    - Malchoff designated Interim Director for Outreach & Education - 1/15/11 to 8/15/11
  - Director of LCSG activities at SUNY Plattsburgh, Tim Mihuc, 0.06 FTE
  - Bethany Sargent, Communications Specialist, 0.6 FTE
- Size of program: Project - Small

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LC SG Management

- Total FTEs on staff

Functional Area	# of individuals	# of FTEs supported by SG	# of FTEs supported by match/leverage
Mgt/Admin	6	0.38	0.32
Comm.	0	0	0
Ext.	13*	1.76*	2.44
Education	0	0	0
Research	11	2.11	0.7

* Includes student Watershed Educators

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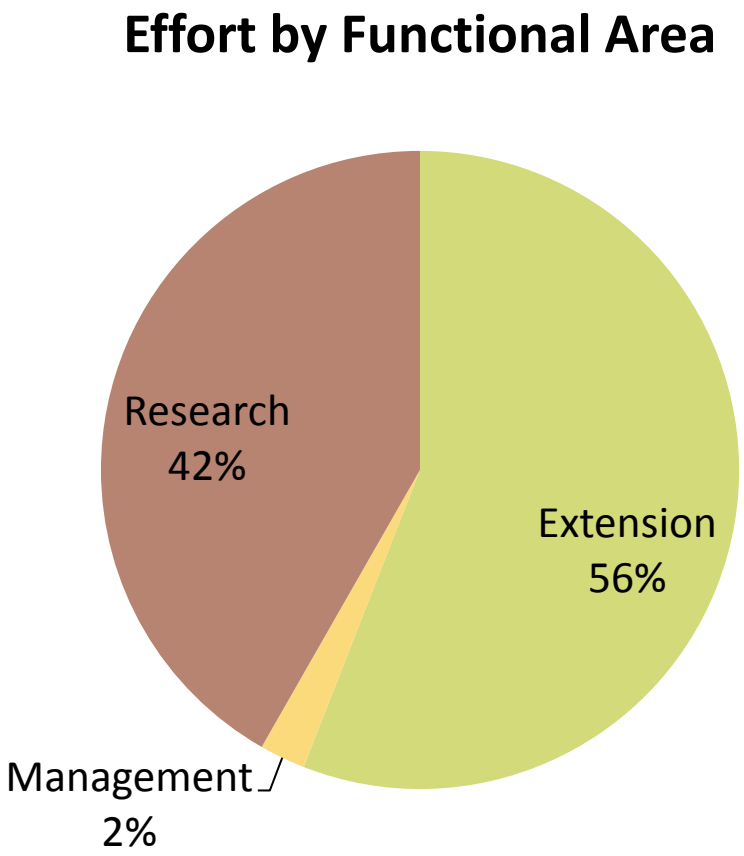
LC SG 2010 Core Budget (Fed + Match) towards each Functional Area



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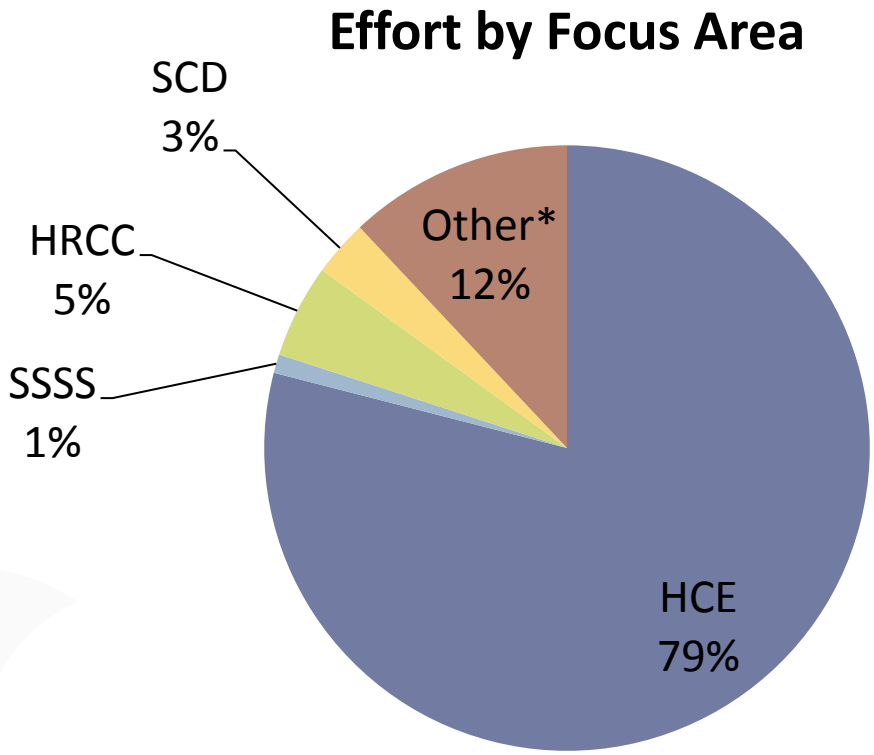
LC SG 2010 Budget towards each Focus Area (Fed + Match + Pass-Through + Managed Leveraged Funds)



*denotes funding for 2 Sea Grant Knauss fellowships

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Significant LC SG Changes (since Jan. 2011)

- Bethany Sargent hired June 2011 (0.6 FTE) to assist the Director and to develop communications
- Jurij Homziak was on sabbatical January – August 2011
- Governing Board met in November 2011
- Program Advisory Committee reconstituted in late fall 2011
- CAP proposal developed in fall/winter 2011; to be submitted in February 2012
- Coordination of staff improved with regular staff meetings
- Website redesigned

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LC SG Program RFP Process

- Request for proposals
  - Thematic areas included those identified in 2010-2014 strategic plan.
- Technical review panel convened via teleconference
- Selection for funding of full proposal made

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LC SG RFP Process for 2012-2013 Projects – Research Metrics

Core Proposals	# of Proposals	# of institutions	# from home institutions
Full proposals submitted	2	2	1
Proposals Funded	1	1	1

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LC SG Contribution to Performance Measures & Metrics

Focus Area	Metrics/State Performance Measures	Actual
HCE	Volunteer Hours	296
HCE	Total K-12 Students Reached through Educators	1,246
HCE & HRCC	Leveraged Funding	$156,529
HCE	Three towns annually adopt and install storm water reduction and NPS pollution prevention best management practices (BMP) through 2013.	3
HCE	At least 700' of shoreline vegetation planted or native vegetation maintained during 2010-2013 in each of seven target communities.	1,200

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LC SG Impacts

Sea Grant educates college students and local businesses on improving water quality and reducing flooding risk in Rutland, Vermont

LCSG partnered with the Rutland Natural Resources Conservation District, Vermont Technical College, the City of Rutland, and local businesses to design and install three low impact development practices on properties in the Moon Brook watershed. 50 Vermont Technical College students partnered with two local businesses and a medical park to improve water quality in their community while learning valuable career skills. In addition, participating businesses now have the knowledge to educate their community on how low impact development landscaping can be an attractive method of improving water quality and reducing the risk of future flooding.

Focus Area: HCE (HRCC)
LCSG Goal: Ecosystem-based approaches used to promote a healthy and diverse ecosystem and provide for sustainable human use and enjoyment of Lake Champlain, the basin and surrounding waters.

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LC SG Impacts

Sea Grant's efforts to protect valuable bass fishery recognized

The City of Plattsburgh and the Plattsburgh North Country Chamber of Commerce recognized the ongoing research and extension efforts of LCSG and Lake Champlain Research Institute staff to protect the lake's nationally recognized black bass fishery. Local expenditures at Plattsburgh-based catch-and-release bass tournaments have been estimated as high $5 million per tournament and the city and chamber now host five major tournaments per year. Sea Grant staff have directed invasive species awareness efforts at pre-tournament angler meetings since 2007, and began investigating bass dispersal following catch-and-release tournaments in 2010.

Recognition came in the form of letters from the city's mayor and the chamber's marketing specialist in support of a research proposal to more fully investigate the bass dispersal issue in 2011 and 2012 - mentioning the need for "more scientific information" to help ensure "the sustainability of bass tournaments which provide great economic benefit to our region."

Focus Area: SCD; LCSG Goal: Strengthen the economic base of basin communities through the sustainable growth and development of coastal and lake dependent businesses, particularly in tourism and recreation.

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LC SG Impacts

Fish habitat restoration continues

The Ausable River Association (ASRA) was recently awarded $46,910 in funding from the L. Champlain Basin Program for a Fish Passage and Connectivity in the Ausable Watershed using Field Assessment tools and GIS Prioritization project.

The new work will:

-Use field assessment methods developed during the 2008 Lake Champlain Basin Fish Passage Initiative conducted by LCRI/Sea Grant and SUNY Plattsburgh which identified and prioritized culverts and bridges that impair the upstream migration of trout and salmon in the Ausable Watershed (Mihuc et.al.2008).

-Utilize and further enhance the workshop methodology presented by M. Malchoff to disseminate information to local and state user groups – beginning with users in Essex County, New York.

Focus Area: HCE; LCSG Goal: Ecosystem-based approaches used to promote a healthy and diverse ecosystem and provide for sustainable human use and enjoyment of Lake Champlain, the basin and surrounding waters.

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LC SG Impacts

Sea Grant and Regional Planning Commission lead effort to use bioengineering to stabilize shorelines in local communities

Specialists from the Northwest (VT) Regional Planning Commission (NWRPC) and LCSG held workshops for town and municipal officials in the Lake Champlain Basin on using bioengineered methods for shoreline stabilization and erosion control, and prepared an award winning guidebook on using bioengineering for shoreline stabilization. Although an accepted erosion control practice in New England, bioengineering was little used in the Lake Champlain Basin.

The education activities had significant impacts:

-Isle La Motte and Ferrisburgh, VT, built bioengineered shoreline stabilization structures.

-Additional projects are being implemented in Westport, New York, and Ferrisburgh, VT

- The towns of Colchester and Isle La Motte, VT and Moriah, NY, changed zoning regulations & coastal construction guidelines to require future shoreline construction to use SG-NWRPC promoted bioengineering methods.

-The City of Burlington, VT, designed a bioengineered shoreline stabilization project to protect the city's lakeshore bike path & is seeking funding for construction.

Focus Area: HRCC; LCSG Goal: Vulnerable communities are prepared for and act to prevent erosion and shoreline destabilization.

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LC SG Impacts

Middle school students work to restore impaired brook through Watershed Alliance Program

Portions of Allen Brook in Williston, VT have been listed on the 303(d) List of Impaired Waters since 1992 due to stormwater runoff and bacteria. A section of the brook near Williston Central School is degraded due to streambank erosion and sedimentation. During the spring of 2009, approximately 90 students worked to improve the habitat along Allen Brook by planting native saplings, installing brush mats and tree tubes, removing honeysuckle and garlic mustard, and sand painting mature trees to prevent damage from beavers. In the spring of 2010, Williston Central School students returned to the site to remove invasive species and reinforce the saplings planted the previous spring. Their 5th -8th grade science teacher has decided to adopt the site with his students to become more permanent stewards of it with support from the Watershed Alliance and Town of Williston Planning Department.

On-going restoration work at this site will:

-Help to improve water quality of & habitat surrounding Allen Brook

- Give this group of students the opportunity to know & experience exactly what it means to be stewards of their watershed.

Focus Area: HCE; LCSG Goal: Ecosystem-based approaches used to promote a healthy and diverse ecosystem and provide for sustainable human use and enjoyment of Lake Champlain, the basin and surrounding waters.

Tim Simard, Williston

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LC SG 2010 Research Accomplishments

Recreational boating study provides framework for sustainable management

Recreational boating, must be planned and managed in a sustainable way to ensure the natural environment is protected, the quality of the experience is maintained, and the lake-based recreation/tourism economy remains healthy. Planning and managing sustainable recreational boating is most effective if it is informed by a conceptual framework and associated program of relevant research.

This study helped to inform lake managers and interest groups:

- About paddler motivations, perceptions & support for potential management actions.
- Baseline resource conditions established for use in future monitoring efforts.
- Study findings contribute to an understanding of what constitutes high quality recreational boating on Lake Champlain & quantifies this through the development of indicators & standards of quality.
- Findings will help stakeholders maintain opportunities for high quality recreation, contributing to the economic development of the recreation & tourism industry.
- A planning/management framework & associated program of research for guiding sustainable recreational boating on Lake Champlain (and other water bodies) was described & applied.
- Research approach provided a systematic way to understand & manage recreational experiences that could be extended to a diversity of freshwater recreational settings (including crowding, shoreline development, & recreation-related ecological impacts).

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Sources (unless otherwise noted)

- Planning, Implementation, and Evaluation Resources (PIER) https://pier.seagrant.noaa.gov
- Personal Communication with Program

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